

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0105520; AI 31222; PER20100001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Artesian Utility Company, Inc
Lake Ramsey Subdivision
P.O. Box 1466
Covington, LA 70434
- II. **PREPARED BY:** Rachel Davis
- DATE PREPARED:** February 8, 2011
- III. **PERMIT ACTION:** reissue LPDES permit LA0105520, AI 31222; PER20100001

LPDES application received: May 29, 2010*

EPA has not retained enforcement authority.

LPDES permit effective: December 1, 1998

LPDES permit expired: November 30, 2003

*An application was received for this facility's renewal permit on February 16, 2004. The permit was public noticed on April 11, 2007 but due to lack of financial security and unpaid fees the final permit was never issued. The Department requested that a new application be submitted in order to update the file and to reissue a draft permit. This application was received on May 29, 2010.

IV. FACILITY INFORMATION:

- A. The application is for the discharge of treated sanitary wastewater from a privately owned treatment works serving the Lake Ramsey Subdivision.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located on Ramsey Road in Lake Ramsey Subdivision, 3.5 miles west of the Village of Ramsey, St. Tammany Parish.
- D. The treatment facility consists of treatment ponds used as lagoons with chlorine disinfection.
- E. Outfall 001

Discharge Location: Latitude 30° 31' 51" North
Longitude 90° 11' 0" West

Description: treated sanitary wastewater

Estimated Flow: 300 Homes x 400 GPD = 0.12 MGD

Statement of Basis

LA0105520; AI 31222; PER20100001

Page 2

Type of Flow Measurement which the facility is currently using:
V-notch weir*

*A continuous recorder was required in the previous permit as well as this reissued permit. According to the company, a continuous recorder is scheduled to be installed at the facility by April 2011.

V. RECEIVING WATERS:

The discharge is into an unnamed drainage ditch, thence into the Tchefuncte River in subsegment 040801 of the Lake Pontchartrain Basin.

The designated uses and degree of support for Segment 040801 of the Lake Pontchartrain Basin are as indicated in the table below^{1/}:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Not Supported	Full	Not Supported	Full	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 040801 of the Lake Pontchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 040801 of the Lake Ponchartrain Basin, has been identified by the U.S. Fish and Wildlife Service (FWLS) as habitat for the Gulf sturgeon, which is listed federally as a threatened species. However, this type of discharge is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Statement of Basis
LA0105520; AI 31222; PER20100001
Page 3

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Rachel Davis
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 040801, Tchefuncte River and Tributaries, is listed on LDEQ's Final 2006 303(d) List as impaired for pathogen indicators and mercury. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to the sanitary wastewater point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

Mercury

Based on the size and nature of the facility, the department believes there is little potential for the discharge to further cause or contribute to the mercury impairment of this subsegment. Therefore, no limitations for mercury will be required of this facility.

Pathogen Indicators

To protect against high levels of pathogenic organisms in the receiving waterbody, fecal coliform limits have been established in the permit.

Outstanding Natural Resource Water

Tchefuncte River, Subsegment 040801, is a designated Outstanding Natural Resource Waterbody (ONRW). In accordance with LAC 33:IX.1119.C.4, existing discharges of treated sanitary wastewater are allowed if no reasonable alternative discharge location is available. As described in Section XII. Additional Information of this statement of basis, alternative discharge types and locations were considered but no alternatives were found that allowed the effluent to be discharged into another stream not designated as an ONRW. Discharging at this location was determined the most appropriate.

Statement of Basis

LA0105520; AI 31222; PER20100001

Page 4

Final Effluent Limits:**OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg (lbs./day)	Monthly Avg	Daily Max	Basis
CBOD ₅	10	10 mg/l	15 mg/l	Limits are set in accordance with the Areawide Policy for St. Tammany Parish and the previous permit
TSS	10	10 mg/l	15 mg/l	Limits are in accordance with the previous permit to prevent degradation of the receiving waterbody, which is listed as an outstanding natural resource waterbody.
Ammonia-Nitrogen	5	5 mg/l	10 mg/l	Limits are set in accordance with the Areawide Policy for St. Tammany Parish and the previous permit

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.)

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7

Statement of Basis

LA0105520; AI 31222; PER20100001

Page 5

4) Total Residual Chlorine

If chlorination is used to achieve the limitations for Fecal Coliform Bacteria, the effluent shall contain NO MEASUREABLE Total Residual Chlorine (TRC) after disinfection and prior to disposal. Given the current constraints pertaining to chlorine analytical methods, NO MEASURABLE will be defined as less than 0.033 mg/l of chlorine.

X. PREVIOUS PERMIT:

LPDES Permit No. LA0105520: Effective: December 1, 1998
Expired: November 30, 2003

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
CBOD ₅	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Ammonia-Nitrogen	5 mg/l	10 mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab
Total Residual Chlorine	Report	Report	1/week	Grab
pH	6.0 (min)	9.0 (max)	2/month	Grab

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

Facility Inspection following the issuance of Compliance Order WE-CN-08-0442, December 1, 2010, EDMS Document No. 7781117.

1. The order required the unauthorized discharge to cease.
2. The order required submission within 30 days of receipt of the order, a report detailing circumstances and actions taken to achieve compliance with the order.
3. The oxidation pond continues to discharge without authorization
4. Mr. Guidry stated he did not received the compliance order.

Facility Inspection, February 15, 2007, EDMS Document No. 7610879.

1. Facility had previously been authorized to discharge under permit LA0105520.
2. This permit expired 11/23/2003; a draft replacement permit was issued on 7/8/04.
3. The facility was sent 2 letters regarding lack of financial assurance. To date, the financial assurance has not been provided to finalize the permit.
4. Facility is a 3-cell oxidation pond (without aeration), tablet chlorine as disinfection. Facility discharging at the time of inspection.
5. Ms. Mary Guidry provided copies of the financial assurance letter and FedEx receipts that were submitted to DEQ on 2/13/07.

B) Enforcement Actions

A review of the files indicates the following recent enforcement action was administered against this facility:

Compliance Order and Notice of Potential Penalty, June 1, 2010, Enforcement Tracking No. WE-CN-08-0442 (EDMS Document No. 4117328)

Statement of Basis

LA0105520; AI 31222; PER20100001

Page 6

Findings of Fact:

1. A review of the files conducted by the Department revealed that the respondent failed to submit monthly DMRs.
2. An inspection revealed that the respondent did not have a continuous flow recorder for the sewage treatment plant.
3. The Respondent failed to sample the effluent according to LPDES permit LA0105520.
4. The Respondent failed to report the data results for Total Residual Chlorine and required by the LPDES permit.
5. The Respondent was not in compliance with the Construction Compliance Schedule within the LPDES permit.

Response from Facility: (EDMS DOC # 7785731)

1. Some DMRs are being submitted by the facility for the years 2000-2003.
2. An electronic flow meter and totalizer will be installed at the facility and the flow will be check on a regular basis.
3. No samples were submitted for TRC but the facility has contracted a new company, Sewer Treatment Specialist (STS), to sample their effluent. STS has begun to sample the effluent and will be testing for TRC along with all the parameters required in the interim limits of the compliance order.
4. Upgrades are going to be made to the facility in order to meet permit standards. A construction schedule with dates that the construction will be finished by will be submitted to the enforcement division. Upgrades include adding aerators to the pond system, a chlorine contact chamber, a flow meter and covering the third cell to prevent algae growth.

C) DMR Review

A review of the files has revealed that the facility has not submitted any DMRs since 2002.

D) Company Compliance History

No other permits were listed in the application.

Please be aware that the Department has the authority to reduce monitoring frequencies when a permittee demonstrates two or more consecutive years of permit compliance. Monitoring frequencies established in LPDES permits are based on a number of factors, including but not limited to, the size of the discharge, the type of wastewater being discharged, the specific operations at the facility, past compliance history, similar facilities and best professional judgment of the reviewer. We encourage and invite each permittee to institute positive measures to ensure continued compliance with the LPDES permit, thereby qualifying for reduced monitoring frequencies upon permit reissuance. As a reminder, the Department will also consider an increase in monitoring frequency upon permit reissuance when the permittee demonstrates continued non-compliance.

Statement of Basis

LA0105520; AI 31222; PER20100001

Page 7

XII. ADDITIONAL INFORMATION:

ENVIRONMENTAL IMPACT QUESTIONNAIRE

The agency requested that Artesian Utility Company, Inc submit answers to the Environmental Impact Questionnaire because of the discharge route of the facility. The document was received on January 18, 2011 (EDMS DOC #7803567). The responses have been reviewed by the agency and have been determined to fulfill the environmental assessment requirement. The answers to those questions are summarized below.

1. Have the potential and real adverse environmental effects of the proposed facility been avoided to the maximum extent possible?

The existing 0.28 MGD treatment capacity is operated and maintained by Artesian Utility Company, Inc. Lake Ramsey Subdivision wastewater is collected via gravity sewer lines into the lift station that pumps into the treatment ponds. The ponds are used as lagoons where the wastewater is disinfected by chlorine (1.0 to 2.5 mg/l) before discharging. The existing facility has been in operation since the original homes were built in 1982. The facility does not receive, treat, or discharge industrial wastewater.

The environmental impact of this development has improved since the installation of the facility. If not for this central sewage treatment facility, the land could have been developed with individual septic tanks at each home, with no effective effluent limits, nor any regulated monitoring and testing. Continuing proper operation and maintenance of the facility in accordance with the LPDES permit, routine monitoring and testing, and proper chlorination of the wastewater should protect human health and the environment to the maximum extent possible. There should be no adverse impact to ground water, air quality, soil, etc. from the facility operations.

2. Does a cost benefit analysis of the environmental-impact cost balanced against the social and economic benefits of the proposed facility demonstrate that the latter outweighs the former?

The social benefit includes the central sewer facility provided to the residents of Lake Ramsey that offers a cost effective and efficient manner to dispose of their domestic wastewater. The residents would otherwise have individual septic tanks that would not be monitored or tested.

The economical benefit includes the cost of operating and maintaining one facility rather than each lot providing their own treatment system. This reduces the regulatory enforcement costs, taxes, payroll, operation costs, maintenance costs, and eliminates the need for installation and maintenance of individual septic tanks.

Currently there are approximately 252 homeowners residing in Lake Ramsey Subdivision. Considering that the treatment facility is regularly tested and in compliance, the environmental impacts are minimal compared to the social and economic benefits of housing 250 or more families.

3. Are there alternative projects which would offer more protection to the environment than the proposed facility without unduly curtailing nonenvironmental benefits?

No. There are no alternative projects which would offer more protection to the environment than the proposed facility without unduly curtailing non-environmental benefits.

Statement of Basis

LA0105520; AI 31222; PER20100001

Page 8

While there are no other wastewater treatment facilities within a reasonable distance from Lake Ramsey, there are a number of alternative processes for treating domestic wastewater. These include but are not limited to, clarifier and/or filtration system, activated sludge process treatment system, and bar screen.

Since Lake Ramsey Subdivision is an existing facility, and in compliance, no other facilities make reasonable sense to tie into. It would be a wasted expenditure of funds to tie into another facility and abandon an on-site, working facility. The nearest facility we are aware of is approximately 1.3 miles away at Penn Mill Lakes. We do not believe this facility is capable at this time, of handling an additional 250+ homes from the Lake Ramsey subdivision.

The existing treatment facility, that has been properly operated and maintained since 1982, is the most environmentally efficient means for wastewater treatment for this development. The existing facility can also handle the capacity for the future lots. Since this is an existing facility and existing residential subdivision, there are no projects to consider as an alternate option.

4. Are there alternative sites which would offer more protection to the environment than the proposed facility site without unduly curtailing nonenvironmental benefits?
-

No. There are no alternative sites which would offer more protection to the environment than the proposed facility site without unduly curtailing non-environmental benefits.

Again, this is an existing facility and there are no other community or regional wastewater treatment facilities in this area capable of servicing Lake Ramsey Subdivision residents. The facility is located within Lake Ramsey, the residential area serviced by the facility. This is not in an environmentally sensitive area. The effluent from this existing facility is discharged into a low, depressed area that is heavily wooded and filters through until the next outfall, that ultimately flows into the Tchefuncte River. Since the sewer treatment facility is located at one of the lowest points of the drainage basin and near the outfall ditch, there are no practical means available to transfer the effluent from the existing facility out of the existing drainage basin. Any other option to relocate the existing facility would not only be costly but impractical to reroute existing sewer lines and relocate the facility.

5. Are there mitigating measures which would offer more protection to the environmental than the facility as proposed without unduly curtailing nonenvironmental benefits?

No. There are no mitigating measures which would offer more protection to the environment than the facility as proposed without unduly curtailing non-environmental benefits.

Routine operation and maintenance is the best quality assurance control to protect the environment. Also, because the residents of Lake Ramsey Subdivision use the existing facility, the resulting operation and maintenance risks to the environment from individual septic tanks can be avoided. This results in more sanitation of discharge and reduction of impact to the environment from the facility rather than the individual users. The Tchefuncte River water quality should continue to not be adversely impacted by the facility's discharge.

The number of homes connected to the treatment facility is far less than the capacity of said oxidation pond. The facility is not near capacity and testing verifies that it is in compliance. Therefore, no additional measures are needed at this time.

Statement of Basis

LA0105520; AI 31222; PER20100001

Page 9

Reopener Clause

This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(C) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act or more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDLs, if the effluent standard, limitations, water quality studies or TMDL's so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Mass Loading Calculations

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.12 MGD.

Effluent loadings are calculated using the following example:

CBOD: $8.34 \text{ lb/gal} \times 0.12 \text{ MGD} \times 10 \text{ mg/l} = 10 \text{ lb/day}$

Monitoring Frequency Requirements

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.1 and 0.5 MGD.

Effluent Characteristics**Monitoring Requirements**

	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	Continuous	Recorder
CBOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Ammonia-Nitrogen	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
Total Residual Chlorine	1/week	Grab
pH	2/month	Grab

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

Statement of Basis

LA0105520; AI 31222; PER20100001

Page 10

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2009.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 2006.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2009.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2009.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Artesian Utility Company, Inc, Lake Ramsey Subdivision, Received May 29, 2010.